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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,740	11/07/2005	Akihiro Shakagori	F-8691	9809
7590		12/14/2006	EXAMINER	
Jordan & Hamburg		FRISTOE JR, JOHN K		
122 East 42nd Street		ART UNIT		
New York, NY 10168		PAPER NUMBER		
		3753		

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/536,740

Applicant(s)

SHAKAGORI ET AL.

Examiner

John K. Fristoe Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/27/05, 11/8/05.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statements filed 5/27/2005 and 11/8/2005 are acknowledged by the examiner.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 4,289,297 (Nakamishi). Nakamishi discloses a seat ring comprising a hollow cylindrical body (1), two side portions (outer sides of element 1 in figure 3) having a flange surface (outside surface of the outside flanges of element 1 in figure 3), the outer circumference of the body portion (1) has an elliptical shape (col. 5, lines 64-68), wherein the inner circumference has a circular shape (within element 1 in figure 3), an annular protrusion (flange portions extending from element 1 in figure 1) having a rectangular shape (figure 3), two stem through holes (4), a boss portion (5), a lug portion (inward projecting portions of element 1 in figure 3), and a ring (6).

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 4,289,297 (Nakamishi) in view of engineering expedient. Nakamishi discloses a seat ring comprising a hollow cylindrical body (1), two side portions (outer sides of element 1 in figure 3) having a flange surface (outside surface of the outside flanges of element 1 in figure 3), the outer circumference of the body portion (1) has an elliptical shape (col. 5, lines 64-68), wherein the inner circumference has a circular shape (within element 1 in figure 3), an annular protrusion (flange portions extending from element 1 in figure 1) having a rectangular shape (figure 3), two stem through holes (4), a boss portion (5), a lug portion (inward projecting portions of element 1 in figure 3), and a ring (6) but lacks the ratio of the thickness dimension in a direction perpendicular to the stem axis from the inner circumference is 1:01 to 2:1. One of ordinary skill in the art of butterfly valve design would manufacture a seat ring that would cooperate with the existing conduits which could encompass having an inner circumference that has a thickness ration of 1:01:1 to 2:1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the seat ring of Nakamishi by making the ratio of the thickness of the valve body between 1:01:1 to 2:1 as engineering expedient in order to cooperate with n existing conduit with those dimensions.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 4,289,297 (Nakamishi) in view of U.S. Pat. No. 5,876,015 (Schaeffer et al.). Nakamishi discloses a seat ring comprising a hollow cylindrical body (1), two side portions (outer sides of element 1 in figure 3) having a flange surface (outside surface of the outside flanges of element 1 in figure 3), the outer circumference of the body portion (1) has an elliptical shape (col. 5, lines

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64-68), wherein the inner circumference has a circular shape (within element 1 in figure 3), an annular protrusion (flange portions extending from element 1 in figure 1) having a rectangular shape (figure 3), two stem through holes (4), a boss portion (5), a lug portion (inward projecting portions of element 1 in figure 3), and a ring (6) but the seat ring made of EPDM. Schaeffer et al. teaches a butterfly valve comprising a seat ring (42) made of EPDM (col. 14, lines 15-17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the seat ring of Nakamishi by making the seat ring from EPDM as taught by Schaeffer et al. in order for the valve seat to be flexible and easy to insert into the seat assembly.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 7,080,820 (Eggleston et al.) discloses an elliptical valve member.

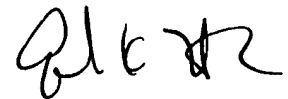
U.S. Pat. No. 6,702,257 (Mollmann) discloses an elliptical butterfly valve.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John K. Fristoe Jr. whose telephone number is (571) 272-4926. The examiner can normally be reached on Monday-Friday, 7: 00 a.m-4: 30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric S. Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John K. Fristoe Jr.  
Examiner  
Art Unit 3753

JKF